

# Plan of Study

## Joint NCSU-UNCA

### Bachelor of Science in Engineering Curriculum

### Mechatronics Concentration

#### FALL SEMESTER

#### SPRING SEMESTER

#### Freshman Year

MATH 191	Calculus I	4		MATH 192	Calculus II	4
LANG 120	Found. Acad. Writing	4		PHYS 221	Physics I	4
CHEM 132	General Chemistry	3		CSCI 201	Intro Algorithm Design - Java	3
<i>E 101</i>	<i>Intro to Engr &amp; Prob Solv'g</i>	<i>1</i>		HUM 124	The Ancient World	4
CHEM 111	General Chemistry Lab	1		<i>EGM 180</i>	<i>Intro to Mechatronics Lab</i>	<i>2</i>
XXX 179	LSIC: Lib Studies Intro Colloq	<u>3</u>				<u>17</u>
		16				

#### Sophomore Year

MATH 291	Calculus III	4		ECE 220	Analytical Found. In ECE	3
PHYS 222	Physics II	4		CSCI 202	Introduction to Data Structures	3
<i>ECE 200</i>	<i>Intro to ECE Lab</i>	<i>3</i>		<i>MAE 208</i>	<i>Engineering Dynamics</i>	<i>3</i>
<i>ECE 206</i>	<i>Organization of Microprocessors</i>	<i>3</i>		<i>ECE 211</i>	<i>Electric Circuits</i>	<i>4</i>
<i>MAE 206</i>	<i>Engineering Statics</i>	<u>3</u>		<i>ECE 212</i>	<i>Fundamentals of Logic Design</i>	<u>3</u>
		17				<u>16</u>

#### Junior Year

MSE 201	Struc & Prop of Engr Mat'ls	3		MAE 314	Solid Mechanics	3
MAE 301	Engr Thermodynamics I	3		<i>ECE 406</i>	<i>Design of Complex Digital Sys</i>	<i>3</i>
<i>ECE 301</i>	<i>Linear Systems</i>	<i>4</i>		HUM 214	Rise of European Civilization	4
ECON 102	Microeconomics	3		ARTS 310	Arts and Ideas	3
HF XXX	Health and Fitness	<u>2</u>		<i>MAE 435</i>	<i>Principles of Automatic Control</i>	<i>3</i>
		15		<i>EGM 360</i>	<i>Adv Mechatronics Design Lab</i>	<u>1</u>
						<u>17</u>

#### Senior Year

MAE 310	Heat Transfer Fundamentals	3		MAE 316	Strength of Mech Components	3
MAE 315	Dynamics of Machines	3		<i>ECE 455</i>	<i>Computer Control of Robots</i>	<i>3</i>
<i>ECE 460</i>	<i>Digital Systems Interfacing</i>	<i>3</i>		<i>ECE 480</i>	<i>Senior Design Project in EE</i>	<i>4</i>
HUM 324	The Modern World	<u>4</u>		STAT 225	Intro to Calc-based Statistics	4
		13		XXX 479	LSSC: Lib Studies Senior Colloq	<u>3</u>
						<u>17</u>

Total hours shown: 128

Italics indicates the course is received from NCSU by distance education technology.

8/31/04